In 1991, a Memorandum of Agreement (MOA) was signed by the U. S. Forest Service, National Park Service, U. S. Fish and Wildlife Service, Bureau of Land Management (Arizona and New Mexico), Bureau of Indian Affairs, the State of Arizona, and the State of New Mexico formally establishing the Southwest Fire Management Board, enhancing the Joint Powers Agreements in place at the time, and the means to plan, prioritize, and implement coordination of policies, directions, and standards for fire management activities in the Southwest Area. The result of this agreement detailed that the land management agencies within the States of Arizona, New Mexico, West Texas, and West Oklahoma would work collaboratively to plan for wildfire emergency response in as cost efficient and cost effective manner as possible.

This interagency annual report is provided as a means to summarize wildland fire activities which occurred during the 1996 season. It will provide highlights of the 1996 season from an agency perspective, wildfire activity statistics, fire cache reports, and overall information on the movement of incident management teams, crews, overhead, and equipment to incidents in the Southwest and other parts of the United States. This report will not encompass all aspects of fire fighting, specifically fire fighting tactics, equipment usage, training, or other managerial activities of suppressing wildfires in the Southwest.

However, as you will see from the information provided in this report, the 1996 fire season in the Southwest Area was without doubt one of the most active seasons on record. The Energy Release Component (ERC) climb to an all time high of 88, mobilization of overhead and crew resources were constant, and fire behavior was as intense as has ever been seen before in the southwest. In the end, the amount of activity in the Southwest Area during the 1996 fire season proved to be quite challenging and rewarding, yet safe, as it is noted that injuries were kept to a minimum and no fatalities were encountered.

A lot of people put a tremendous amount of energy into providing the information in this report. Our thanks goes out to each and everyone of them. The following people contributed photographs for this report: Ron Moody, Allen Farnsworth, Jimmy Farnsworth, Bob Beckley, Gregorio Valdez, Kathy Allred, and Virginia Gibbons. A special thanks goes to each of you also.

A limited number of copies of this document will be printed. If additional copies are needed, it can be found on the Southwest Area Web Site at http://www.fs.fed.us/r3/fire. Check under the Fire Management Activities page.

Southwest Fire Management Board

The Southwest Fire Management Board (SWFMB) was active throughout 1996 on several areawide and national fronts. The most obvious area was in helping the combined federal and state agencies in developing and managing a coordinated response to the most severe wildland fire season on record. Board members participated in closeout and post fire reviews of most of the large fires which occurred, and the Board was instrumental in coordinating the areawide and later national review of the shelter deployments on the Dome Fire.

As the season worsened and human caused ignitions increased, the Board approved the formation of an areawide, interagency fire prevention team. Fire prevention specialists were brought in from around the country to assist zones and the Board in the development of an areawide approach to prevention. This is the first time in US history that prevention has been approached on such a large geographic scale. The effort was very successful and was later adopted by the Great Basin and Alaska.

Later in the year, the Board met in Phoenix with Zone Board members, fire management officers, Forest Supervisors, Agency Administrators, and other interested personnel from the various federal and state agencies to discuss type II team issues. The result of this meeting was the development of a 'Prescription to Restore the Health of the Southwest Area Fire Management Program."

Other areas in which the Board was involved with throughout the year included initiating a Crew Board Committee, extending the Joint Power Agreement with the State of New Mexico, monitoring the progress for getting the Southwest Area on the Internet, team awards, and completion of the Grand Canyon Interagency Agreement.

On the broader policy front the Board provided coordination of phase 1 of the national firefighter safety study which involved interviews with over 130 southwest area firefighters and managers. The Board also developed an in depth response to the National Wildland Fire Policy Review. The action elements within the response will form the basis for managing and coordinating effective interagency wildland fire operations well into the next century.

Cliff Chetwin, NPS Chairperson, Southwest Fire Management Board

AGENCY HIGHLIGHTS

U. S. Forest Service

Region 3

Southwestern Region

By any measure, the 1996 fire season was a record setter for the Southwest. Never before have Energy Release Component (ERC) values been so high, and never before have we seen fires burn with such intensity across the entire region. Our firefighters began the year in the Southwest in February, and finished in California in October. It truly was a year of extremes. Names such as Dome, Hondo, Lone, Pot, Hochderffer, Bridger Knoll, Arch, and Cottonwood became common in our conversation. Each was a major fire. Even National Forests that rarely experience stand replacement fires did so in 1996.

During the 1996 fire season there were 2368 fires, 638 human caused and 1730 lightning caused, that were initial attacked throughout the region. Acreage levels burned by these fires were 105.962

from human cause and 105,534 from lightning activity for a total of 211,496. These acreage figures were the highest recorded ever within the region. Of the total number of 2368 fires within the region, only 28 made it to over 100 acres. Several of these large fires required the mobilization of a type I or type II incident management team. Through the Southwest Coordination Center, there were over 4000 orders for

overhead personnel. The best statistic, and the one Southwesterner's are most proud of is that there were no

fatalities experienced during such a year of extremes. Fire shelters were used on at least three occasions, and in at least one occasion clearly saved lives. Continued emphasis on L.C.E.S (Lookout, Communication, Escape routes, and Safety Zones) needs to be a priority.

Successful Organizations learn from recent experience. We tried hard to capture the lessons learned. The Southwest Fire Management Board prepared a 'Prescription' for insuring the health of the fire management program. This prescription deals with incident team management training, performance, accountability and expectations. The number of type II incident management teams was reduced to a total of five. Line officers agreed to establish expectations from the militia, and safety was ratified as the highest priority.

The year included some significant personnel changes in the Forest Service Aviation and Fire Management Program. Two forest level FMO's, Santa Fe and Lincoln National Forests have transferred to different positions. Al Defler began his tour as Director during the most active portion of the year. Bill Russell accepted the challenge of guiding the Fire 21 program at the national level. Larry Hindman became the Regional Air Safety Officer for region 2 and 3. Brett McGee filled the Helicopter Specialist position, and Ivan Puplidy joined us as a Lead Plane Pilot.

The year was very successful, but much remains to be done. The combination of many factors has resulted in fewer agency employees being available for fire suppression assignments. The pipeline of qualified individuals for incident management teams is weak. We continue to experience units becoming vulnerable as they are stripped of expertise by team callouts. There is still much to accomplish, line officer support and interagency support is at a high level.

In December as the year came to a close, the Region 3 Fire Management Officer Team met in Tucson and hammered out a strategic plan for the future. Six major focus areas were identified and actions agreed upon. These include; Wildland Urban Interface, tomorrow's workforce, cost leadership, smoke, wildland fire planning, and large fire suppression management. This strong strategic plan will guide us into 1997 and beyond in a truly professional way.

Al Defler Director, Aviation and Fire Management

National Park Service

Intermountain Region Southwestern Parks

The southern Rockies experienced an usually dry and warm winter. The second driest period of the 20th century resulted in extreme drought conditions developing in Texas, Oklahoma, New Mexico, Arizona, southern Colorado, and southern Utah. Some areas even approached or exceeded the driest recorded conditions ever. Oklahoma and Texas developed unusually heavy fire activity in February and March which resulted in considerable resource movement and the first ever involvement of the Federal Emergency Management Agency (FEMA) in wildland fire in either state. These fires were notable not only for their numbers but also for their unusual resistance to control; this pattern was to be repeated throughout the rest of the season. As the normal spring episodic wind events began in early March the drought deepened and overall conditions worsened in New Mexico, Arizona, and the four corners area. Lightning activity was minor as the

atmosphere remained dry, however, with fire indices exceeding all historic southwestern levels, human caused ignitions reached unprecedented levels and seriously strained interagency suppression resource capabilities. In April, the field area's largest wildfire, the DOME fire, occurred at Bandelier, with a total of 16,486 acres (over 4,500 NPS); this fire was eventually managed by a Type 1 incident management team. Notably, three NPS employees, along with several USFS personnel were required to deploy fire shelters on this fire when their engines were overrun. Overall the Service was fortunate in that the DOME fire was of only two significant fires on NPS lands, although cooperators suffered

numerous major incidents. The field area's support actions and mobilization throughout the entire season reflect the situation. By late July, the monsoon became well established and resulted in above average rainfall in most areas, helping to mitigate (but not eliminate) the drought. As a result, fire activity dropped off significantly as resource support to other areas continued at a high level for all field area units.

Despite the severity of the wildfire situation good progress was made in the programs prescribed fire component. Prescribed natural and management ignited burns were conducted in several southwestern parks in Grand Canyon, Bandelier, and Saguaro. One of the Service's prescribed fire modules was hosted at Bandelier and was heavily used as a cost effective resource although demand outstripped availability. Fire effects monitoring remained the program's key weakness due to lack of qualified staffing but late in the year the field area received approval to hire a fire effects specialist and major progress is anticipated in 1997.

Activities continued to be dominated by the Service's reorganization and resultant decision to restructure the wildland fire organization within the field area. In concert with the park fire staffs it was decided to combine the old regional fire staffs in Santa Fe and Denver into a single organization led by a field area fire management officer. This organization would represent and speak for the interests of all three clusters within the field area. It was determined that Denver would be the most efficient location for the new organization, and a transition plan was developed. The new organization was implemented late in the year although some of the fire staff may remain in Santa Fe until FY98. An advisory group, comprised of one park fire management officer from each cluster, was also formed and was actively involved in establishing budget and program

many of the small parks needed more fire management assistance than was being provided it was also decided to establish fire groups in which each park would be assigned to an existing park fire management officer who would provide professional fire management services as needed.

Two new faces joined the fire staff during 1996, in newly created positions. Dave Lentz was hired as the field area's prescribed fire management specialist and Elizabeth Anderson was hired as the fire monitoring specialist. With these dedicated positions the field area's prescribed fire management program will have significant improvements in 1997.

Significant external accomplishments included greater NPS involvement in the geographic area coordinating groups (GACC) in USFS regions 1, 2, 3, and 4, including the chairmanship in regions 2 and 3. In response to the escalating human caused fire problems in the southern portion of the area an interagency, multistate, fire prevention planning team was created and hosted by IMFA. The team's efforts led to a major reduction in numbers and severity of human caused ignitions and represented the first ever prevention effort on this scale; the concept was successfully adopted later in the season by Alaska and the Great Basin. In May, FEMA established a federal drought task force to develop responses to worsening western drought and the field area fire staff represented wildland fire management for DOI on this taskforce.

Cliff Chetwin
Deputy Fire Management Officer

Bureau of Indian Affairs

Tri- Area Offices Albuquerque, Navajo, Phoenix

I assumed the Assistant Director position at SWCC in 1995. The position had been vacant since the retirement of Walt Sixkiller in 1994. This position has been challenging and exciting. I experienced some health problems in the middle of 1996 fire season. My health is improving every day and I look forward to the future.

Mr. Nathan Shrouds came in from the Juneau Area Office in Alaska to fill in for me. Mr. Shrouds was on detail at SWCC from late May to late June. Mr. Shrouds is now the Phoenix Area Office, Fire Management Officer.

Ron Matt is the BIA Coordinator here at SWCC. Mr. Matt is responsible for the mobilization, reassignment and demobilization of resources between home units and incidents in and outside the Southwest Area.

The Aviation Specialist position was vacant in 1996. This position coordinates with the three Area Offices and the Interagency partners on procedural aircraft operations, training and accident investigations. BIA selected Mr. Steve Rossiter for this position in 1997.

A Regional fire planner is now working for the BIA at SWCC. Mr. Steve Larrabee is now in this position. Mr. Larrabee will provide technical assistance and oversight of the fire management planning activities for the Southwest Area.

The Tri-Areas are represented by Albuquerque, Navajo and Phoenix Area offices in the Southwest Area. The lack of snowfall in the winter of 1995-96, below normal precipitation levels in early Spring, and above normal temperatures throughout the Winter and Spring months were contributing factors for an early fire season in the Southwest. Fires ignited more readily in the timber stands well within the early spring months. Extreme fire behavior existed in all of the fuel types causing several fires to escape beyond normal initial attack methods. Fires that traditionally only took one crew to extinguish them now required two to three crews in 1996. Spot fires and slopovers on extended attack required several crews for suppression actions.

The following is a breakdown of the Tri-Area fire season per Area Office:

Albuquerque Area Office

The Albuquerque Area Office's 1996 fire season was above normal for the Fire Management Programs. With below normal precipitation, burning conditions were extreme for the initial attack activity. Statistics-to-date show that, Area-wide, 555 wildland fires burned a total of 14,000 acres of Indian Trust lands.

Southwest Firefighter (SWFF) crew dispatches, a vital source of income for tribal members, were above normal, and several of these dispatches were outside the Southwest Region. Combined, the 9 BIA agencies in the Albuquerque Area filled 350 support action requests. Early in the season, fires started on the Mescalero Indian Reservation. The Elk Springs fire was managed by an SW Type 2 Team. The Chino Wells fire was managed by an SW Type 1 Team. The Chino Wells fire developed into bad flood conditions upon receiving moisture from the SW monsoon season.

Out of region fire activity increased again in August, when crews were sent to California, Colorado, Nevada, Oregon, Washington, Idaho, and Utah. In it's continued effort to assure prompt, accurate payment for administratively determined (AD) firefighters, the Area Office's ADO payment team wrote checks totaling 3.5 million which included 2.5 million for 110 Native American crews.

Navajo Area Office

The Navajo Area fire season was a little higher than normal. The normal fire year ranges from 160 to 180 fires. In 1996, there were 194 fires assigned for a total of 6,823 acres burned. There were 118 lightning caused fires burning 6484 acres, and 76 human caused fires burning 339 acres. Twenty-eight support actions included standby's, training, helicopter, overhead and Type II crew assignments. We had an early fire season on the Newlands south of I-40, and on lands south of Lupton, and Sanders, Arizona. Our large fires, Allentown and Hard Scrabble, occurred in the above areas. The Allentown fire was 3393 acres and the Hard Scrabble near Witchwells was 2674 acres. Both of our large fires were caused by lightning.

The Navajo Area Office (NAO) experienced its worst drought in several years. Several livestock died on the range and water shortages for livestock uses were at a critical stage for most of the summer. Restrictions and closures of certain areas were coordinated with the Tribe due to the fire danger and fire severity. NAO coordinated with our interagency partners on the ban of fireworks and assisted the fire prevention team assigned to the Southwest Area.

The Area Forester position in now filled by Mr. Harold Russell. Gerold George, NIFC Training Specialist Forester, reported for duty 09/29/9 as the ID leader to develop the ten-year forest management plan for the Navajo Tribal Forestry. The Navajo Tribal Forestry still has Calvin Becenti as the AD Crew Coordinator for the Navajo Area. NAO sent four individuals to ADO/CO training in Phoenix, AZ during November 1996.

Phoenix Area

The Phoenix Area had a busy fire season in 1996. Statistics show that 1,484 fires burned approximately 21,000 acres of Indian trust lands.

The Phoenix Area had two project fires, the Petan/Sheep Creek fire on the Duck Valley Reservation in Nevada and the White Springs Complex on the Fort Apache Reservation in Arizona. The White Springs Complex totaled 191 acres of commercial and non-commercial forest land burned. An emergency rehabilitation plan was submitted and

funded for aerial seeding, monitoring Apache Trout habitat, documenting, and monitoring suppression damage to cultural resources. The total cost of \$84,509 was requested to implement the plan.

In addition, there were 489 support action requests. The agencies and tribes within the Phoenix Area provided crews, overhead, and equipment to support the wildland fire efforts at the area, regional, and national level. In all, the Phoenix Area expended \$12,552,982.12 on the wildland fires in 1996.

Willie Begay Assistant Director, Tri-Area Fire Management

Bureau of Land Management

Arizona State Office Fire and Aviation Group

The 1996 fire season activity was less than anticipated for the record high indices. The Arizona Strip was the only office that experienced an above average season. Due to the high indices Arizona BLM once again secured severity funding. Due to the low live fuel moisture the Arizona Strip, Phoenix, and Safford District requested and received severity funding. Severity funding provided BLM Arizona with three singe engine air tankers, extra staffing for our engines and logistical support Severity enhanced our initial attack capabilities. It also played a significant role on an interagency basis within the fire zones.

BLM Arizona continues to refine the Single Engine Air Tanker program (SEAT's). The Safford District has a very functional reload base for the SEAT. The base was used to

support Type 1
helicopters during
the Mt. Graham
fire A aviation
base is being
established for
helicopters and
SEAT's at the
Kingman Airport.
Arizona BLM has
the lead to produce
a national SEAT
manager handbook.

The Arizona fire program went through some personnel changes. Kirk Rowdabaugh (State Fire Management Officer) took a management position in Elko, Nevada. Al Alavarez from our Washington Office Fire and Aviation was selected to replace Kirk. Kevin Hamilton was welcomed aboard as our new State Aviation Manager. Arizona BLM continued to provide support to the Prescott Fire Cache by hiring 1 seasonal. This position is targeted to be a WAE position in FY-97.

The Arizona Strip District Completed the first phase of the Mt. Trumbull Forest Ecosystem Restoration project. Two successful prescribe burns were conducted to reduce fuel loading and duff layers. This project will continue for many years to return to forest to a pre-settlement state. Phoenix District started a Fire Management Plan for the Haulapis Mountains. The comprehensive are management plan will establish the direction for future fire management actions within the unit.

Al Alvarez State Fire Management Officer

Bureau of Land Management

New Mexico State Office Fire and Aviation Group

In spite of the extremely high fire danger during the 1996 season, the final acreage burned for New Mexico BLM was average. In some areas the lengthy drought inhibited growth of the fine fuels that dominate BLM lands, but another factor that kept the fire acreage low was very aggressive initial attack. New Mexico BLM, working in conjunction with our cooperators, used severity funds for early activation and propositioning of suppression

forces. The large number of resources in the Southwest Area and coordination and cooperation between agencies prevented the fire situation from getting out of hand.

We learned a number of lessons during the fire season. The success of the severity-funded interagency Area-wide fire prevention team showed that prevention efforts are a key component for dealing with an especially severe fire season. We also learned that we can improve our interagency communication and cooperation when going into (and coming out of) fire restrictions and closures. Ongoing contact between agency administrators can decrease confusion and problems for the public.

During the season, there was a great deal of interest in safety issues by firefighters, fire staffs, and agency administrators, as well as by other offices across the country. The increased emphasis on safe fire operations has lead vo more reports of incidents from the field. This as a positive development, as long as a constructive and concerned approach is maintained by everyone. We can best manage the inherently risky nature of firefighting with open, responsible communication.

After the summer monsoons set in, New Mexico BLM supported incidents and units in other Geographic Areas with engines and overhead. We had firefighters out of the state on

assignments through late September.

One of the major goals for us over the next few years witl be to develop and implement plans and actions for restoring fire to the ecosystem where it is appropriate, while maintaining effective suppression operations. Working Closely with the resource disciplines, the public, other wildland and regulatory agencies, will enable wildland fire organizations to meet the challenges of the future.

Bob Lee State Fire Management Officer

U. S. Fish And Wildlife Service

Southwest Region

The 1996 wildland fire season throughout Region 2 which encompasses Oklahoma, Texas, New Mexico, and Arizona experienced the second busiest fire season in terms of acres burned (30,500 acres) and the highest number of incidents (135) in the past 10 years. In the Southwest Area the Fish and Wildlife Service experienced an above average wildland fire season in 1996. Fish and Wildlife Service engine crews responded to 17 Refuge wildfires which burned 4,748 acres of Refuge lands in Arizona and New Mexico.

The San Pedro Fire on the Bosque Del Apache National Wildlife Refuge in New Mexico was the largest wildfire which burned 4100 acres on the Refuge between June 8 and June 12, 1996. DI-1202 fire report occurrence remarks: "In terms of magnitude and behavior, this was the worst fire in the 57 year history of the refuge. In a matter of hours some of the finest riparian forest in the middle Rio Grande Valley was destroyed. This native riparian community supports one of the most diverse wildlife assemblages of any habitat in the southwestern United States and is invaluable to neotropical migrating songbirds and several endangered species".

Refuges in Arizona and New Mexico accomplished five management ignited prescribed fire projects for a total of 2,628 acres. Increasing levels of fire danger and wildland fire activity throughout the southwest activated the need for fire restrictions and suspension of prescribed fire activity, thus reducing the total number of planned prescribed burns for 1996 in the Region.

As the Region 2 fire season turned out this year, the hottest dispatch was supporting the interagency fire community in the Southwest, Northwest, and Northern area large fires. Resource mobilization from refuges included engine resources and an array of interagency overhead assignments to include: air operations, dispatch, single resource, safety officer and line operation positions. Service personnel throughout Region 2's area (Oklahoma, Texas, New Mexico, and Arizona) spent approximately 650 staff days on wildfires on lands administered by other federal and state agencies throughout the country.

The Region established four new fire staff positions. Fire Management of ficer's were

hired for the Lower Colorado River complex in Yuma, Arizona and a New Mexico State wide position was created at Bitter Lake NWR in Roswell. Two assistant FMO's were hired to strengthen the presuppression, suppression, and prescribed fire program capabilities at Buenos Aires refuge in Arizona.

Mike Phillips Regional Fire Management Officer

Arizona State Land Department

Division of Fire Management

The State of Arizona experienced a severe drought and fire danger on record in order to protect lives and property of Arizona, Governor Symington allocated \$1,075,000 for presuppression resources.

- a. 14 wildland fire engines
- b. 3 20-person crew
- c. 2 air attack/reconnaissance aircraft
- d. 4 single engine air tankers

As a result of these resources being available, they were quickly dispatched to some of the 12 Forest Service campaign fires costing more than \$25 million. Evacuations occurred with 300 people

evacuated with no homes burned near Pinedale, and 100 people evacuated with no homes burned near Clear Creek north of Payson. The Fire Management Division set up a temporary public information office. The main objective was

to work with other federal wildland fire agencies in regards to advising the public of recreational and property updates on closures and fire restrictions. Prevention and fire information was given to the media and the general public.

The State Land Department responded to 205 assist fires this year. These assists included the mobilization of fire departments, presuppression resources and other state agencies under the direction of the State Forester to aid in suppression actions on Federal lands especially in the north half of state.

The State Land Department protected 22.4 million acres of land within Arizona. We responded to 646 fires that burned 61,428 acres of state and private lands. As a result of additional resources and public relations combined with federal agencies, prevention and aggressive initial attack activity reduced the size and cost of suppression action statewide.

Other significant highlights:

The Arizona State Land Department separated the Fire Management Division from the old forestry management division. The State Forester appointed John Hafterson as the division director. along with creation of 8 positions with individuals assigned to dispatch coordination along with dispatch supervision, fire operations, fire aviation and communications, fire training and misc. fire positions. Also, 4 fire business management positions were created.

Dave Behrens Fire Management Division

State of New Mexico

State Forestry Division

The extreme fire season in the western states started in January with range fires in Oklahoma and Texas, then moved into New Mexico with the Chino Wells Fire, which occurred on April 20, 1996 and burned 8,260 acres on the Mescalero Apache Reservation. A lack of fall moisture in 1995 and an unusually mild winter set the stage for very active fire behavior by April. Low fuel moisture in the 100 and 1,000 hour fuels were below 20 percent by before April 1. On April 25 the Dome Fire in the Jemez Mountains burned 16,774 acres on the Santa Fe National Forest and revealed to everyone that the 1996 Fire Season would be a long one. The Dome fire was followed by the Hondo Fire near Questa, New Mexico on May 5, 1996 which burned 7,651 Acres and destroyed 32 homes.

The New Mexico Forestry Division experienced a heavy fire season during 1996. From January 1, 1996 through December 31, 1996 the Division recorded 931 fires which burned 84,396 acres of state and private land throughout New Mexico. Of the 931 fires 291 were caused by lightning and 640 were man-caused. The Hondo fire burned 1,100 acres of private land and the states share of the suppression cost was \$1,072,355.00. The Northern New Mexico Type II Incident Management Team was called to assist in the suppression of 2 fires on private land during the fire season. The first being the Sawyer Fire which burned 108 acres of commercial timber land near Mora, New Mexico on May 27 and the second fire was the Rojo Fire which burned 1,300 acres of commercial timber

land near Ocate, New Mexico on June 9. The Southern New Mexico Type II Incident Management Team assisted the Division with the suppression of the San Pedro Fire which burned 5,975 acres of private and U.S. Fish and Wildlife lands south of San Marcial, New Mexico on June 8. The Dipping Vat Fire which occurred on June 12 on the Jicarilla Apache Reservation burned approximately 1200 acres of state and private land and the states share of the suppression cost was \$270,758.00. The New Mexico Forestry Division expended over 6.5 million dollars during 1996 suppressing the 931 wildland fires on state and private land.

The Division dispatched over half of its D4 employees on out-of-state fire assignments during the 1996 fire season. The Division had 10 employees filling positions on Type I and Type II Interagency Incident Management Teams during the 1996 fire season.

Fra	ank Smith				
Ch	nief, Fire Manage	ement Division	1		

FIRE WEATHER SUMMARY

National Weather Service

Weather Service Forecast Office Phoenix Area Office

Summary of weather and prior and during the fire season in Arizona from winter 1995 through autumn 1996.

The winter of 1995-96can be best described as being quite dry and warm. The snow pack was at the lowest it has been in several years and precipitation was well below normal over nearly all of the state. High pressure In the eastern Pacific tended to keep weather systems from striking the Southwest, with the southerly jet being much weaker than the main jet that blew across the northern U.S..

The spring months of March through early June continued the trend of the winter months ...that is, quite dry and warm. Whatever was left of the snow pack nearly disappeared from most mountain areas by early April. Enough monsoon moisture did filter into the southeast Arizona in June to give above normal precipitation to parts of southeast Arizona, but most of the state remained dry right through June.

There was some recovery of rainfall during the summer months, especially in July, where some areas reported above normal amounts. Even so, a number of areas continue to receive below normal precipitation. However, August once again proved to be dry with most areas recording below normal precipitation along with above normal temperatures.

The weather going into the autumn months was somewhat wetter, especially during the month of September, but then a return to a drier regime took place again in October, when a strong ridge of high pressure established itself off the California coast.

Robert Berkovitz Fire Weather Forecaster, Phoenix Arizona

National Weather Service

Albuquerque Area Office

New Mexico's drought was the major weather story this past year. After an exceptionally warm and dry winter of 1995-96, the state experienced one of the driest spring periods on record. These severe conditions set the stage for the most active and lengthy fire season in nearly two decades.

The year began with a snow pack in the northern mountains averaging 25 to 35 percent of normal, with even less across the Gila and Lincoln. Major winter storms were rare during January and February. Only a couple of systems produced widespread heavy precipitation across western and northern New Mexico. The dry pattern persisted into early spring producing unseasonably warm conditions and Albuquerque officially recorded the

warmest winter since 1893. Extended periods of strong, afternoon winds and above normal temperatures during April and May decreased already critically low fuel moistures. The explosive fuel conditions coupled with strong winds produced some of the most destructive wildfires in recent history. Dry thunderstorms became more frequent the first couple of weeks in June which started numerous fires across the western and northern forests. Remnants of hurricane Alma brought welcome relief toward the end of June. An unusually strong tap of tropical moisture resulted in several consecutive days of widespread heavy rains. As is typical for our state, most locations made up significant precipitation deficits in just a week's time. The early onset of summer rains and increased humidity during the monsoon brought an end to the extreme fire danger in early July. Interestingly, after experiencing the driest spring this century, Albuquerque recorded the fourth wettest June and seventh wettest summer. All but the northwest and portions of the eastern plains, principally the northeast, ended the summer with above normal precipitation. Kerry M. Jones Fire Weather Forecaster